

ABSTRACT OF THE DISCLOSURE

An apparatus for generating quadrature phase signals in
a half-rate data recovery circuit, which is adapted to
generate a first and a second clock signals having the same
frequency and being 90 degrees out of phase with each other.
5 The apparatus for generating quadrature phase signals
mainly comprises a base selector, a first phase
interpolator and a second phase interpolator. The base
selector generates, based on a region control signal, a pair
10 of phase region boundaries for the first clock signal as
well as a pair of phase region boundaries for the second
clock signal by using a plurality of reference clock signals.
The first and second phase interpolators perform, based on
15 a position control signal, weighted average processes for
the two pairs of phase region boundaries, respectively, to
thereby obtain the first and the second clock signals.